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DEC 24 2004

**Yehouda Harpaz**  
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21 Dec 2004

Re: Application No. 10/031,776 - resubmission of supplemental appeal brief - fax sending

Dear Sir/Madam,

I am faxing to you three copies of a new version of the supplemental appeal brief, in response to the notification of non-compliance with 37 CFR 1.192(c), which was sent on 11/26/2004. This supplemental brief is in response to the action which sent to me on 07/21/2004 (non-final rejection after reopening prosecution).

I have already sent you all of this by a letter on 6 Dec 2004, but the deadline is 26 dec 2004 and you haven't got the letter yet, so I re-send by fax to make sure you got it in time.

In the letter itself, I have also attach a terminal disclaimer with respect to patent 6,568,683, to overcome the double patent rejection (form PTO/SB/26) plus payment (form PTO-2038). These are *not* attached to this fax.

In response to the notification of non-compliance, I have made the supplemental brief independent of the original brief, by inserting a section discussing the novelty of Claim 1 (section (a)). The other sections changed to contain a full discussion and refer to section (a) when appropriate, instead of referring to the original brief.

Section (d) is the heading that discusses the Blumberg-in-view-of-Othello rejection.

I believe I have corrected all the points that were raised in the notification.

Thanks,

Yehouda HARPAZ



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2 Dec 2004

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Claims 2-7 - cancelled.

The appeal is against the rejection of Claim 1.

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5) *Summary of the invention*: An electronic board which is played by touching points, with a novel behaviour. The behaviour is that, except playing in turns, the sole rule is that a point is a legal move if its 'visibility' for the player is above or equal to some fixed number. The 'visibility' of a point is determined by the board by checking in turn each of a predefined set of imaginary straight lines emanating from the point. If the line does not pass through any illuminated point, it is assigned a value of 0. Otherwise the line is assigned a value of 1 if the closest illuminated point that it passes through is illuminated in the colour of the player, or -1 if it is in the opponent's colour. The sum of the values of the lines is the 'visibility' of the point for the player. The game ends when neither of the players has a legal move, and the player with more points of his/her colour wins.

The concept of 'visibility' and its implication is discussed in the description starting at the bottom of p. 3 of the description and continues through p. 4, and is illustrated in drawings 4 and 5 (the drawings cannot be understood without the text).

6) *Issues*: The rejection of Claim 1 under the doctrine of double patenting is based on misunderstanding what Harpaz 6,568,683 claims, and on ignoring the behaviour that is described in the claims. The rejection of Claim 1 under USC 102 (e) is based on a mis-representation of what Golad 6,231,441 says as if it contains material that it doesn't, and also doesn't take into account the full contents of Claim 1. The rejection of Claim 1 under USC 103 because of Blumberg *et al* in view of Othello is based on a large mis-representation of what Blumberg *et al* say.

7) *Grouping of Claims*: Only one claim is appealed.

**8) Argument:****(a) Novelty and non-obviousness of Claim 1**

(a.1) As I wrote in (c.5) in the appeal brief, the idea that is expressed in lines 14-22 of Claim 1 of the current application (starting with "when a player touches a point..."), is a combination of the following elements:

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- (2) Use the first illuminated point that is encountered to define the value for a direction (1 for player's colour, -1 for the other colour).
- (3) Sum the values in all directions, rather than just checking if any of the directions fulfils some condition.
- (4) Use the result to decide if a move is legal.
- (5) Use this evaluation as the sole determination of the behaviour of the board during the game, rather than make the evaluation just part of the rules of the game.

(a.2) Element (4) is the only element that can be found in the documents that were found by the ISR and the search in the USPTO, except my own applications. In my first application, (application GB 9907163.1) elements (3) and (4) appear, but not in a combination (they appear in separate games). Element (5) is completely new in the priority document of the current application (GB 9919551), and it is an important innovation, because with simple behaviour it generates a game with considerable strategic depth. It may be possible to dig out documents that show one of elements (1) (2) or (3) on its own, but I am not aware of such documents, and searches don't find them. I am sure that no combination of any two of elements (1)-(4) appears in any prior document. Thus even each element of (1),(2) or (3) on its own is not that obvious, combining any pair of elements (1)-(4) together is quite non-obvious, combining all of them together is very non-obvious, and combining them with element (5) is very very non-obvious.

(a.3) The combination of all these elements together generates a behaviour that is radically different from anything that have been published until now in any context, including all the documents that were cited by the examiner or in the international search report (excluding my other applications which may mention it, but has the same or later priority date). This is true not only in the context of electronic boards, but also video/computer games and classical games. This can be verified by scanning the catalogues of toys and games companies, for example:

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(a.4) Hence the combination of the elements which are listed above in (a.1), as presented in Claim 1, is novel and inventive over anything that has been published earlier.

**(b) Double Patenting**

(b.1) Rejection for double patenting with respect to Harpaz 6,568,683: To overcome the rejection, I file together with this supplemental brief a terminal disclaimer with respect to 6,568,683. I explain here why I don't actually agree with the rejection anyway, but this can be ignored because of the terminal disclaimer.

(b.2) Harpaz 6,568,683 claims only elements (2) and (3) of the elements that are listed in (a.1) above. Therefore elements (1), (4) and (5) (the main novelty) are not claimed in 6,568,683, and hence the current application is novel and non-obvious over the claims of Harpaz 6,568,683.

(b.3) The examiner makes 6,568,683 looks closer to the current application by mis-representing what 6,568,683 says. In the last line of p.3 and first line of p.4 he says about 6,568,683:

“... the game manager checks for each point the illumination state of the point and of a pattern of points around to insure to insure appropriate movement of a player...”

(b.4) The last part is simply wrong. The check in 6,568,683 is to decide what will be the state of the point in the next period of time, and it happens each short period of time, without any relation to any player's action (6,568,683, Claim 1, column 8, lines 12-16). As explained in 6,568,683 column 3, lines 53-58, this change each period of time (“generation”) is a major part of the innovation in 6,568,683.

(b.5) Provisional rejections for double patenting with respect to the copending applications 10/031890 and 10/031942: Neither of 10/031890 nor 10/031942 claims *any* of the elements listed in (a.1) above. Therefore the current application is non-obvious over both of them. The examiner ignores these elements completely.

**(c) Claim rejections - 35 USC 102**

(c.1) Rejection of Claim 1 as being anticipated by Golad 6,231,441 (page 6): This rejection is done by attributing to Golad text that it does not contain, and ignoring some of the elements that were listed in (a.1).

(c.2) In his description of the board which is described in Golad 6,231,441, the examiner includes this statement (p.6, lines 3-5 from the bottom, *my italics*):

“... and a game manager evaluating legal moves by each player by *checking in turn each of a pre-defined set of imaginary straight lines emanating from the point* to evaluate a correct and incorrect move, ...”

(c.3) The part in italics is a mis-representation of Golad 6,231,441, because there is nothing in 6,231,441 that can be interpreted this way. This part is actually lifted, almost *verbatim*, from Claim 1 of the current application.

(c.4) The examiner explains this mis-representation in the following text (p.6, last two lines and p.7 top):

"..., in which the examiner interprets to be in the computer informing a player on a incorrect move by flashing the correct playing areas on the grid point in straight lines, which is equivalent to applicant's game manager evaluating legal or illegal moves by a player (column 3, line 54 - column 4, line 9)."

(c.5) I did not understand this explanation, and I don't think it is a coherent English text, but it clearly does not contain anything to do with "checking in turn each of a pre-defined set of imaginary straight lines ....". The text in 6,231,441 that the examiner refers to (column 3, line 54 - column 4, line 9) also does not contain anything that may be interpreted this way. In fact, in the example in 6,231,441 the evaluation is whether the move "traps" or borders an occupied area (column 4, lines 14-17).

(c.6) Of the elements listed above in (a.1), only element (4) is mentioned (in any way) by Golad 6,231,441, and there is nothing in 6,231,441 that could be interpreted as any of the elements (1), (2), (3) and (5). Therefore 6,231,441 clearly doesn't anticipate Claim 1. The examiner reached his conclusion because he mis-represented 6,231,441 to have element (1) and (3) as shown above in (c.2) and (c.3), and ignored elements (2) and (5) altogether.

**(d) Claim Rejections - 35 USC 103**

(d.1) Rejection of Claim 1 as being unpatentable over Blumberg et al (5,417,425) in view of Othello (p.7): Of the elements that were listed above in (a.1), only element (4) appears in Othello, and none of the elements appear in Blumberg et al. Thus Blumberg et al in view Othello still does not present elements (1), (2), (3) and (5). As discussed above in paragraphs (a.2) - (a.4), these elements give a novel and non-obvious combination.

(d.2) The examiner gives the impression that Blumberg et al present these elements by attributing to Blumberg et al text that is actually from the current application. On p.8, line 3, the examiner writes:

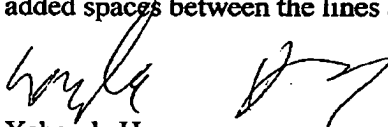
"Blumberg does expressly disclose the following:

When a player touches a point, the games manager checks if it is a legal move, and if it is ...."

(indented paragraph continues for around half a page)

(d.3) All the indented paragraph is not taken from Blumberg et al at all. In fact it is simply the second half of Claim 1 of the current application. There is nothing in Blumberg et al that can be claimed to say what is said in this paragraph, by any stretch of imagination. Thus the examiner makes the current application obvious with respect to Blumberg et al by attributing to Blumberg et al the most innovative part of claim 1 of the current application. Without the false attribution, Blumberg et al in view of Othello is still very very far from the behaviour that is disclosed in Claim 1, because together they contain only element (4).

**e) Informal Claim Objections:** In the claims in the appendix, I removed italization and added spaces between the lines and indentation. The text is identical to the previous version.

  
Yehouda Harpaz

Customer number: 33593

## 9. Appendix - Claims

### 1 (original) An electronic board comprising:

a grid of grid points on a flat surface, where each grid point is a visible element which is capable of detecting when it is pressed, and can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface; and a character display ; and

a game manager made of

a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed, and a computer program which is executed by the CPU,

which manages a one or more games, of which at least one game is played according to these rules:

when a player touches a point, the games manager checks if it is a legal move, and if it is switches the point to the player's colour;

to evaluate if a point is a legal move, the games manager checks in turn each of a pre-defined set of imaginary straight lines emanating from the point, assigning a value of 0 to each of these lines that does not pass through an illuminated point, a value of 1 if the closest illuminated point that it passes through is illuminated with the colour of the player, and -1 if it is in the opponent's colour, and then compares the sum of the values of all the lines to a fixed number, and if the sum is larger or equal the point is a legal move for the player;

the games manager declares as winner the player that has more points of their colour in the end of the game.

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The concept of 'visibility' and its implication is discussed in the description starting at the bottom of p. 3 of the description and continues through p. 4, and is illustrated in drawings 4 and 5 (the drawings cannot be understood without the text).

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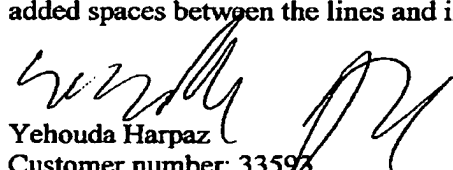
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- (5) Use this evaluation as the sole determination of the behaviour of the board during the game, rather than make the evaluation just part of the rules of the game.

(a.2) Element (4) is the only element that can be found in the documents that were found by the ISR and the search in the USPTO, except my own applications. In my first application, (application GB 9907163.1) elements (3) and (4) appear, but not in a combination (they appear in separate games). Element (5) is completely new in the priority document of the current application (GB 9919551), and it is an important innovation, because with simple behaviour it generates a game with considerable strategic depth. It may be possible to dig out documents that show one of elements (1) (2) or (3) on its own, but I am not aware of such documents, and searches don't find them. I am sure that no combination of any two of elements (1)-(4) appears in any prior document. Thus even each element of (1),(2) or (3) on its own is not that obvious, combining any pair of elements (1)-(4) together is quite non-obvious, combining all of them together is very non-obvious, and combining them with element (5) is very very non-obvious.

(a.3) The combination of all these elements together generates a behaviour that is radically different from anything that have been published until now in any context, including all the documents that were cited by the examiner or in the international search report (excluding my other applications which may mention it, but has the same or later priority date). This is true not only in the context of electronic boards, but also video/computer games and classical games. This can be verified by scanning the catalogues of toys and games companies, for example:

<http://www.hasbro.com/games/>  
or an online directory of board-games, for example:  
[http://directory.google.com/Top/Games/Board\\_Games/](http://directory.google.com/Top/Games/Board_Games/)  
<http://www.board-games-directory.com>  
[http://dmoz.org/Shopping/Toys\\_and\\_Games/Games/Board\\_Games/New/](http://dmoz.org/Shopping/Toys_and_Games/Games/Board_Games/New/)  
(Note that the idea does appear in my domain, <http://maldoo.com>)

(a.4) Hence the combination of the elements which are listed above in (a.1), as presented in Claim 1, is novel and inventive over anything that has been published earlier.

**(b) Double Patenting**

(b.1) Rejection for double patenting with respect to Harpaz 6,568,683: To overcome the rejection, I file together with this supplemental brief a terminal disclaimer with respect to 6,568,683. I explain here why I don't actually agree with the rejection anyway, but this can be ignored because of the terminal disclaimer.

(b.2) Harpaz 6,568,683 claims only elements (2) and (3) of the elements that are listed in (a.1) above. Therefore elements (1), (4) and (5) (the main novelty) are not claimed in 6,568,683, and hence the current application is novel and non-obvious over the claims of Harpaz 6,568,683.

(b.3) The examiner makes 6,568,683 look closer to the current application by mis-representing what 6,568,683 says. In the last line of p.3 and first line of p.4 he says about 6,568,683:

"... the game manager checks for each point the illumination state of the point and of a pattern of points around to insure to insure appropriate movement of a player..."

(b.4) The last part is simply wrong. The check in 6,568,683 is to decide what will be the state of the point in the next period of time, and it happens each short period of time, without any relation to any player's action (6,568,683, Claim 1, column 8, lines 12-16). As explained in 6,568,683 column 3, lines 53-58, this change each period of time ("generation") is a major part of the innovation in 6,568,683.

(b.5) Provisional rejections for double patenting with respect to the copending applications 10/031890 and 10/031942: Neither of 10/031890 nor 10/031942 claims *any* of the elements listed in (a.1) above. Therefore the current application is non-obvious over both of them. The examiner ignores these elements completely.

**(c) Claim rejections - 35 USC 102**

(c.1) Rejection of Claim 1 as being anticipated by Golad 6,231,441 (page 6): This rejection is done by attributing to Golad text that it does not contain, and ignoring some of the elements that were listed in (a.1).

(c.2) In his description of the board which is described in Golad 6,231,441, the examiner includes this statement (p.6, lines 3-5 from the bottom, *my italics*):

"... and a game manager evaluating legal moves by each player by *checking in turn each of a pre-defined set of imaginary straight lines emanating from the point* to evaluate a correct and incorrect move, .."

(c.3) The part in italics is a mis-representation of Golad 6,231,441, because there is nothing in 6,231,441 that can be interpreted this way. This part is actually lifted, almost *verbatim*, from Claim 1 of the current application.

(c.4) The examiner explains this mis-representation in the following text (p.6, last two lines and p.7 top):

"..., in which the examiner interprets to be in the computer informing a player on a incorrect move by flashing the correct playing areas on the grid point in straight lines, which is equivalent to applicant's game manager evaluating legal or illegal moves by a player (column 3, line 54 - column 4, line 9)."

(c.5) I did not understand this explanation, and I don't think it is a coherent English text, but it clearly does not contain anything to do with "checking in turn each of a pre-defined set of imaginary straight lines ....". The text in 6,231,441 that the examiner refers to (column 3, line 54 - column 4, line 9) also does not contain anything that may be interpreted this way. In fact, in the example in 6,231,441 the evaluation is whether the move "traps" or borders an occupied area (column 4, lines 14-17).

(c.6) Of the elements listed above in (a.1), only element (4) is mentioned (in any way) by Golad 6,231,441, and there is nothing in 6,231,441 that could be interpreted as any of the elements (1), (2), (3) and (5). Therefore 6,231,441 clearly doesn't anticipate Claim 1. The examiner reached his conclusion because he mis-represented 6,231,441 to have element (1) and (3) as shown above in (c.2) and (c.3), and ignored elements (2) and (5) altogether.

**(d) Claim Rejections - 35 USC 103**

(d.1) Rejection of Claim 1 as being unpatentable over Blumberg et al (5,417,425) in view of Othello (p.7): Of the elements that were listed above in (a.1), only element (4) appears in Othello, and none of the elements appear in Blumberg et al. Thus Blumberg et al in view Othello still does not present elements (1), (2), (3) and (5). As discussed above in paragraphs (a.2) - (a.4), these elements give a novel and non-obvious combination.

(d.2) The examiner gives the impression that Blumberg et al present these elements by attributing to Blumberg et al text that is actually from the current application. On p.8, line 3, the examiner writes:

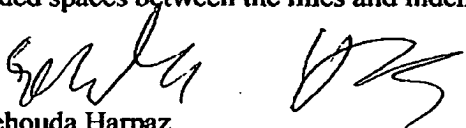
"Blumberg does expressly disclose the following:

When a player touches a point, the games manager checks if it is a legal move, and if it is ...."

(indented paragraph continues for around half a page)

(d.3) All the indented paragraph is not taken from Blumberg et al at all. In fact it is simply the second half of Claim 1 of the current application. There is nothing in Blumberg et al that can be claimed to say what is said in this paragraph, by any stretch of imagination. Thus the examiner makes the current application obvious with respect to Blumberg et al by attributing to Blumberg et al the most innovative part of claim 1 of the current application. Without the false attribution, Blumberg et al in view of Othello is still very very far from the behaviour that is disclosed in Claim 1, because together they contain only element (4).

**e) Informal Claim Objections:** In the claims in the appendix, I removed italization and added spaces between the lines and indentation. The text is identical to the previous version.

  
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## 9. Appendix - Claims

### 1 (original) An electronic board comprising:

a grid of grid points on a flat surface, where each grid point is a visible element which is capable of detecting when it is pressed, and can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface; and a character display ; and

a game manager made of

a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed, and a computer program which is executed by the CPU,

which manages a one or more games, of which at least one game is played according to these rules:

when a player touches a point, the games manager checks if it is a legal move, and if it switches the point to the player's colour;

to evaluate if a point is a legal move, the games manager checks in turn each of a pre-defined set of imaginary straight lines emanating from the point, assigning a value of 0 to each of these lines that does not pass through an illuminated point, a value of 1 if the closest illuminated point that it passes through is illuminated with the colour of the player, and -1 if it is in the opponent's colour, and then compares the sum of the values of all the lines to a fixed number, and if the sum is larger or equal the point is a legal move for the player;

the games manager declares as winner the player that has more points of their colour in the end of the game.